EMS Trading Partner Users' Manual

December 12, 2005

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LIST OF ILLUSTRATIONS

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SECTION 1

INTRODUCTION

This document describes the screens for the Trading Partner (TP) Interface software for the Electronic Management System (EMS). The exhibits displaying the interaction between the TP and the EMS are not screen shots. Therefore, the spacing on the actual displays may be different.

Throughout this document the term TP refers to all trading partners. The term State TP is used when an item applies only to the States.

This document is divided into sections for the following activities:

- Trading Partner Registration, Section 2
- Logging On to the System, Section 3
- Changing Settings, Section 4
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- Requesting Transmission Status Report, Section 7
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The main changes for PY2006 are the addition of the "Change Password" menu item and the "State Return" menu for State TPs.

SECTION 2

TRADING PARTNER REGISTRATION

Trading partners, including State TPs, register with the Third Party Data Store (TPDS) in order to obtain an ETIN to be used to log on to EMS. TPs can be registered to send files as transmitters, reporting agents (RA), or both. Reporting agents are authorized to sign the tax return they are submitting by entering a PIN. Transmitters only submit the tax return for others, but cannot sign the returns. State TPs that will be participating in the State Acknowledgment program and/or will retrieve state return data need to register with TPDS as a State Ack transmitter. It is important to know how a TP is registered to send files as well as how the TP is sending a particular file (either as a transmitter or as a reporting agent). The send files screen prompts differ based on TPDS registration.

SECTION 3

LOGGING ON TO THE SYSTEM

The EMS has incorporated a new password management feature within the trading partner interface, which is documented in Section 3 of this manual. This section illustrates the different responses for each password condition when a trading partner's password must be changed. Section 3 is categorized into five subsections, which are listed as follows:

- Successful Login – No Password Change Required, Section 3.1
- Successful Login – Password Change Required, Section 3.2
- Unsuccessful Login, Section 3.3
- EMS Unavailable, Section 3.4
- EMS Main Menu Processing, Section 3.5

Note: Password rules can be found in Appendix G.

The following discussion describes how a TP logs on to the system. When a TP connects to EMS, the "Authorized Use" banner shown in Exhibit 3-1 is displayed.

```
WARNING!  THIS SYSTEM IS FOR AUTHORIZED USE ONLY!

This computer system is the property of the United States Government.  The
Government may monitor any activity on the system and retrieve any
information stored within the system.  By accessing and using this system, you
are consenting to such monitoring and information retrieval for law
enforcement and other purposes.  Users should have no expectation of privacy
as to communication on or stored within the system, including information
stored locally on the hard drive or other media in use within the unit (e.g.,
floppy disks, tapes, CD-ROM, etc.).
```

Exhibit 3-1 Authorized Use Banner

The TP is then prompted for his/her login id and password as shown in Exhibit 3-2. (Note: Not only will the password not be displayed, but also there will be no indication of how many characters the TP has typed.)

```
login: 00000
Password:
```

Exhibit 3-2 Login and Password Prompts

3.1 SUCCESSFUL LOGIN - NO PASSWORD CHANGE REQUIRED

If the TP successfully logs on and the TP's password will expire in seven days or less, then the message shown in Exhibit 3-3 is displayed and processing continues as described in Section 3.5. (Note that "N" will be replaced by the number of days remaining until the password must be changed.)

```
    Password must be changed in N day(s).
```

Exhibit 3-3 Password Change in N Days

If there are more than seven days until the password expires, then processing continues as described in Section 3.5

3.2 SUCCESSFUL LOGIN - PASSWORD CHANGE REQUIRED

There are times when a TP correctly supplies his/her login id and password, but is required to change his/her password before proceeding. These include:

- the TP first logs in
- the TP's current password has expired
- the TP's password has been reset by an EMS system administrator as a result of the TP contacting the Home Submission Processing Center (SPC) EMS Help Desk

When any of these situations occur, the TP is prompted to enter a new password and to confirm his/her new password by re-entering it as shown in Exhibit 3-4.

```
    Enter new password:
    Re-enter new password:
```

Exhibit 3-4 New Password Prompts

If the TP's responses meet the rules for changing the password, the password is changed and the message shown in Exhibit 3-5 is displayed. The TP will subsequently use the new password to log into either EMS processing center. Processing then continues as described in Section 3.5.

```
    Password changed.
```

Exhibit 3-5 Password Change Confirmation

However, if the TP's responses to the password prompts do not meet the rules for changing the password, then an error message is displayed. A TP is given three tries to change his/her password.

If the TP does not enter the same password in response to the "Enter new password" and "Re-enter new password" prompts, then the password is not changed and the message shown in Exhibit 3-6 is displayed. If the TP has unsuccessfully attempted to change his/her password less than three times, he/she is prompted for his/her new password as shown in Exhibit 3-4. If this is the third unsuccessful attempt, then the TP is disconnected.

```
    New passwords don't match.
```

Exhibit 3-6 Unmatched New Passwords Message

If the TP enters a new password that does not meet the rules, then the password is not changed and the message shown in Exhibit 3-7 is displayed. If the TP has unsuccessfully attempted to change his/her password less than three times, he/she is prompted for his/her new password as previously shown in Exhibit 3-4. If this is the third unsuccessful attempt, the TP is disconnected.

```
    Password rule(s) have not been met.
```

Exhibit 3-7 Password Rule Violation Message

If the TP has concurrent sessions, only one can change the password. If the TP attempts to login to a second session, while the first session is actively changing the password, the message shown in Exhibit 3-8 is displayed and the TP is disconnected.

```
    Login failed.  Another session is trying to change the password.
```

Exhibit 3-8 Another Login Session Changing Password Message

If a system error occurs during the change password operation, the password may or may not be changed. The message shown in Exhibit 3-9 is displayed and the TP is disconnected. The TP may need to try both his/her old and new passwords on his/her next login.

```
    System error.
```

Exhibit 3-9 System Error Message

3.3 UNSUCCESSFUL LOGIN

After each unsuccessful login attempt due to the TP entering an incorrect login id or password, the system displays the message shown in Exhibit 3-10.

```
   Login incorrect
```

Exhibit 3-10   Login Incorrect Message

After three consecutive unsuccessful login attempts, the TP is disconnected.   After six consecutive unsuccessful login attempts (in two or more consecutive sessions) the TP's account is disabled. Once the account has been disabled, any attempt to login to the account causes the system to display the message shown in Exhibit 3-11 and the TP to be disconnected.   If this happens, the TP should contact the Home SPC EMS Help Desk.

```
   This account is currently disabled.
```

Exhibit 3-11   Disabled Account Message

3.4 EMS UNAVAILABLE

If the EMS application is not available when the TP attempts to login, one of two messages is displayed after the login id and password prompts.   If EMS is unavailable because of scheduled down time, the message shown in Exhibit 3-12 is displayed and the TP is disconnected.

```
   EFS is currently unavailable.  Additional information may be
   available on IRS quick alerts.
```

Exhibit 3-12   EFS Unavailable Message

If the EMS application is unavailable for unscheduled reasons, the message shown in Exhibit 3-13 is displayed and the TP is disconnected.

```
   EFS is busy.  Wait at least 10 minutes, then retry.
```

Exhibit 3-13   EFS Busy Message

3.5   EMS MAIN MENU PROCESSING

Once the TP has successfully completed the login process (including changing his/her password, if necessary), the "last login" message is displayed as shown in the Exhibit 3-14.

```
Last login: Tue Sep 4 10:39:31 from computername
```

Exhibit 3-14   Last Login Message

The "Official Use" banner shown in Exhibit 3-15 is then displayed.

```
          ----------------------------------------------------------
               F O R   O F F I C I A L   U S E   O N L Y

                     #     #####     ####
                     #     #   #    #
                     #     #   #     ####
                     #     #####        #
                     #     # #   #      #
                     #     #   #   ####

                     U.S. Government computer

               F O R   O F F I C I A L   U S E   O N L Y
          ----------------------------------------------------------
```

Exhibit 3-15   "Official Use" Banner

Next the Main Menu is displayed. The list of choices depends on whether the TP is a State TP or not. The Main Menu for non-State TPs is shown in Exhibit 3-16 while the Main Menu for State TPs is shown in Exhibit 3-17. Since most TPs are not State TPs the Main Menu exhibits in the remainder of this document, except for Section 9, will look like Exhibit 3-16.

From the Main Menu, the non-State TP can now choose to end the session, receive acknowledgment files and transmit a file, change the protocol and/or compression settings, request a Transmission Status Report, or change his/her password. Whenever the TP completes a process initially selected from the Main Menu other than Logoff, he/she is returned to the Main Menu screen.

```
        MAIN MENU

     1) Logoff
     2) Receive/Send File(s)
     3) Change File Transfer Protocol [ZMODEM]
     4) Change Compression Method [NONE]
     5) Request Transmission Status Report
     6) Change Password

  Enter your choice:
```

Exhibit 3-16 Initial Main Menu for non-State TP

From the Main Menu, the State TP can now choose to end the
session, receive acknowledgment files and transmit a state ack file,
change the protocol and/or compression settings, request a Transmission
Status Report, change his/her password, or request the State Return
Menu to perform the State functions described in Section 9. Whenever
the State TP completes a process initiated by menu items 2-6, he/she is
returned to the Main Menu screen. Whenever the State TP chooses to
exit the State Return Menu, he/she is returned to the Main Menu.

```
        MAIN MENU

     1) Logoff
     2) Receive/Send File(s)
     3) Change File Transfer Protocol [ZMODEM]
     4) Change Compression Method [NONE]
     5) Request Transmission Status Report
     6) Change Password
     7) Show State Return Menu

  Enter your choice:
```

Exhibit 3-17 Initial Main Menu for State TP

For all TPs, the current file transfer protocol is displayed in
brackets next to the "Change File Transfer Protocol" menu item.
Likewise, the TP's current compression method is displayed in brackets
next to the "Change Compression Method" menu item. The possible file
transfer protocols and compression method values are identified in
Section 4, where the "File Transfer Protocols" and "File Compression
Methods" menus are discussed.

It should be noted that a TP's initial compression method is
"NONE." Since the EMS does not auto-sense compressed files, a TP must
select a compression method before submitting compressed files. If the
TP has selected a compression method, his/her acknowledgment files and

Transmission Status Report are compressed and returned using the selected compression method.

At any prompt, if the TP does not respond in 60 seconds the following message is displayed: "DISCONNECTING FROM EFS" and the TP is disconnected.

If the TP enters a character that is not one of the listed number choices, i.e., is not 1-6 for non-State TPs or is not 1-7 for State TPs, then an invalid menu selection message along with the Main Menu is displayed. An example is provided in Exhibit 3-18. If the TP fails to make a valid selection in three attempts, the TP is disconnected.

```
        MAIN MENU

    1) Logoff
    2) Receive/Send File(s)
    3) Change File Transfer Protocol [ZMODEM]
    4) Change Compression Method [NONE]
    5) Request Transmission Status Report
    6) Change Password

Enter your choice:  8


Invalid menu selection.  Try again.

        MAIN MENU

    1) Logoff
    2) Receive/Send File(s)
    3) Change File Transfer Protocol [ZMODEM]
    4) Change Compression Method [NONE]
    5) Request Transmission Status Report
    6) Change Password

Enter your choice:
```

Exhibit 3-18   Invalid Main Menu Selection

SECTION 4

CHANGING SETTINGS

This section explains how to change the TP's communication protocol and compression settings.

4.1   *CHANGING THE TRANSMISSION PROTOCOL*

To change the transmission protocol, the TP chooses "Change File Transfer Protocol" as shown in Exhibit 4-1.

```
        MAIN MENU

        1) Logoff
        2) Receive/Send File(s)
        3) Change File Transfer Protocol [ZMODEM]
        4) Change Compression Method [NONE]
        5) Request Transmission Status Report
        6) Change Password

   Enter your choice:   3
```

Exhibit 4-1   Choosing Change File Transfer Protocol

When the TP chooses "Change File Transfer Protocol," the menu shown depends on whether or not the TP has been approved to use the FTP protocol (see Appendix C for FTP usage). If the TP cannot use the FTP protocol, the menu shown in Exhibit 4-2 is displayed. Brackets frame the TP's current file transfer protocol. The TP's initial setting is "ZMODEM."

```
        FILE TRANSFER PROTOCOLS MENU

        1) Return to MAIN MENU
        2) [ZMODEM]
        3) XMODEM-1K
        4) YMODEM BATCH

   Enter your choice:
```

Exhibit 4-2   Initial File Transfer Protocol Menu Display without FTP

If the TP has been approved to use the FTP protocol, he/she must provide certain configuration information to the IRS before being able to use FTP. Once the TP's FTP configuration information has been added to the EMS system, then the menu shown in Exhibit 4-3 is displayed.

```
        FILE TRANSFER PROTOCOLS MENU

        1) Return to MAIN MENU
        2) [ZMODEM]
        3) XMODEM-1K
        4) YMODEM BATCH
        5) FTP

    Enter your choice:
```

Exhibit 4-3   Initial File Transfer Protocol Menu Display with FTP

        The TP can change the protocol or return to the Main Menu.
Exhibit 4-4 demonstrates the TP changing his/her file transfer protocol
to FTP.

```
        FILE TRANSFER PROTOCOLS MENU

        1) Return to MAIN MENU
        2) [ZMODEM]
        3) XMODEM-1K
        4) YMODEM BATCH
        5) FTP

    Enter your choice: 5
```

Exhibit 4-4   Changing File Transfer Protocol to FTP

        After the TP selects a protocol, the Main Menu is redisplayed
with the selected protocol in brackets as shown in Exhibit 4-5. This
protocol setting is saved and is used for all future incoming/outgoing
file transfers unless the TP changes the protocol again.

```
            MAIN MENU

        1) Logoff
        2) Receive/Send File(s)
        3) Change File Transfer Protocol [FTP]
        4) Change Compression Method [NONE]
        5) Request Transmission Status Report
        6) Change Password

    Enter your choice:
```

Exhibit 4-5   Redisplay of Main Menu after Protocol Change

        While in the File Transfer Protocols Menu, any character other
than one of the menu number choices is considered invalid (as shown in
Exhibit 4-6).

```
            FILE TRANSFER PROTOCOLS MENU

        1) Return to MAIN MENU
        2) [ZMODEM]
        3) XMODEM-1K
        4) YMODEM BATCH
        5) FTP

    Enter your choice:  0
```

Exhibit 4-6   Invalid File Transfer Protocol Menu Selection

        If the TP enters an invalid character, an invalid menu selection
message along with the File Transfer Protocols Menu is displayed as
shown in Exhibit 4-7.   If the TP fails to make a valid selection in
three attempts, the TP is disconnected.

```
     Invalid menu selection.  Try again.

         FILE TRANSFER PROTOCOLS MENU

         1) Return to MAIN MENU
         2) [ZMODEM]
         3) XMODEM-1K
         4) YMODEM BATCH
         5) FTP

     Enter your choice:
```

Exhibit 4-7 Invalid File Transfer Protocol Menu Selection Response

After the TP chooses a valid option from the File Transfer Protocols Menu or chooses "Return to MAIN MENU," the Main Menu is redisplayed with the newly chosen protocol in brackets (Exhibit 4-8).

```
        MAIN MENU

    1) Logoff
    2) Receive/Send File(s)
    3) Change File Transfer Protocol [FTP]
    4) Change Compression Method [NONE]
    5) Request Transmission Status Report
    6) Change Password

Enter your choice:
```

Exhibit 4-8 Redisplay of Main Menu after Protocol Change

The TP can choose any menu item to continue or choose Logoff to end the session.

4.2   *CHANGING THE COMPRESSION METHOD*

To change the compression method, the TP chooses "Change Compression Method" from the Main Menu as shown in Exhibit 4-9.

```
        MAIN MENU

    1) Logoff
    2) Receive/Send File(s)
    3) Change File Transfer Protocol [FTP]
    4) Change Compression Method [NONE]
    5) Request Transmission Status Report
    6) Change Password

Enter your choice:  4
```

Exhibit 4-9 Choosing Change Compression Method

The File Compression Methods Menu is displayed as shown in Exhibit 4-10. Brackets frame the current compression method. The two supported compression methods are gzip (a freeware program available at www.gzip.org) and compress (a Unix compression utility). If the TP chooses 3) GZIP or 4) COMPRESS and sends a file that was compressed using PKZIP file format 2.04g or later, EMS is able to decompress the file. EMS Ack files that are returned to the TPs are named based on the compression method chosen. For example, a TP sends in a file named abc.zip compressed with PKZIP 9 and chooses option 3) GZIP. The Ack file returned will have the extension beginning with .GZ. See Exhibit A-1 in Appendix A for the complete list of possible Ack file names. PKZIP and WINZIP will then decompress these files successfully. PKZIP 9 and WINZIP 9 were both successfully tested with EMS. EMS does not support the use of PKZIP's new encryption capabilities because of the "key management" issue.

```
        FILE COMPRESSION METHODS MENU

        1) Return to MAIN MENU
        2) [None]
        3) GZIP
        4) COMPRESS

    Enter your choice:  3
```

Exhibit 4-10   Initial File Compression Methods Menu Display

The TP can change his/her compression method or return to the Main Menu. Exhibit 4-11 demonstrates the TP changing his/her compression method to gzip.

```
        FILE COMPRESSION METHODS MENU

        1) Return to MAIN MENU
        2) [None]
        3) GZIP
        4) COMPRESS

    Enter your choice:  3
```

Exhibit 4-11   Changing Compression Method to GZIP

After the TP chooses a compression method, the Main Menu is redisplayed with the selected method framed by brackets as shown in Exhibit 4-12. This compression method setting is saved and is used for all future incoming/outgoing file transfers unless the TP changes the compression method again. The TP's initial setting is "None." Before using compression, the TP must select a method from the File

Compression Methods Menu. (If, after choosing the compression method,
the TP sends a file and EMS fails to decompress it, the file is
rejected and an error acknowledgment is sent to the TP. Refer to
Appendix B for the format of this error acknowledgment.)

```
        MAIN MENU

        1) Logoff
        2) Receive/Send File(s)
        3) Change File Transfer Protocol [FTP]
        4) Change Compression Method [GZIP]
        5) Request Transmission Status Report
        6) Change Password

    Enter your choice:
```
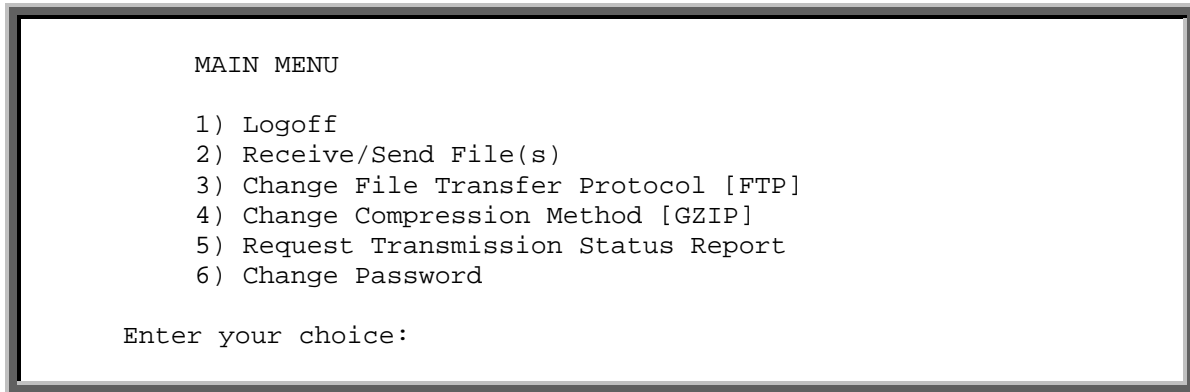
Exhibit 4-12 Main Menu Display After Change Compression Method Menu

        While in the File Compression Methods Menu, any character other
than one of the menu number choices is considered invalid (as shown in
Exhibit 4-13).

```
        FILE COMPRESSION METHODS MENU

        1) Return to MAIN MENU
        2) [None]
        3) GZIP
        4) COMPRESS

    Enter your choice:  5
```
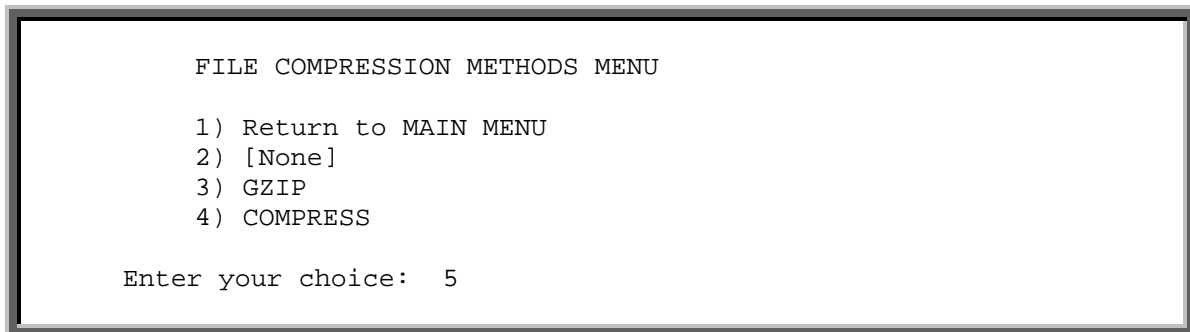
Exhibit 4-13 Invalid File Compression Menu Selection

        If the TP enters an invalid character, an invalid menu selection
message along with the File Compression Methods Menu is displayed as
shown in Exhibit 4-14. If the TP fails to make a valid selection in
three attempts, the TP is disconnected.

```
        Invalid menu selection.  Try again.

            FILE COMPRESSION METHODS MENU

            1) Return to MAIN MENU
            2) None
            3) [GZIP]
            4) COMPRESS

        Enter your choice:
```
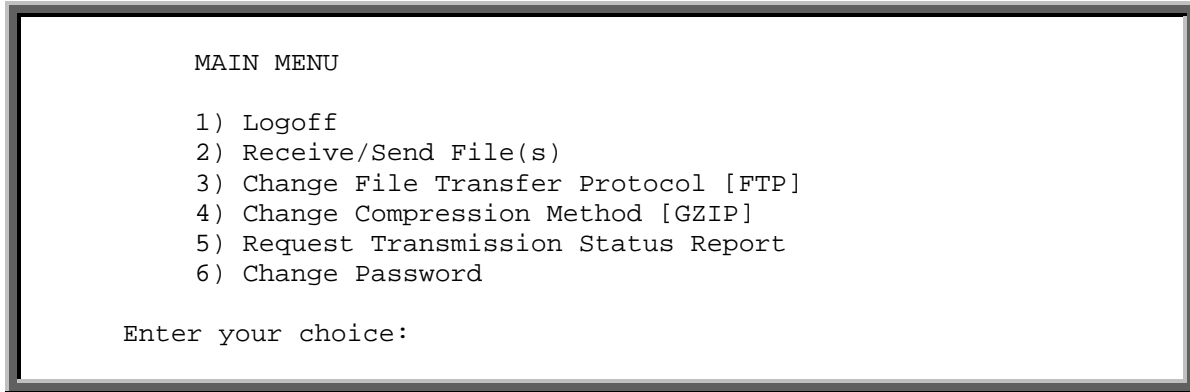
Exhibit 4-14 Invalid File Compression Methods Menu Selection Response

After the TP chooses a valid option from the File Compression Methods Menu or chooses "Return to MAIN MENU," the Main Menu is redisplayed with the newly chosen compression method in brackets (Exhibit 4-15).

```
        MAIN MENU

        1) Logoff
        2) Receive/Send File(s)
        3) Change File Transfer Protocol [FTP]
        4) Change Compression Method [GZIP]
        5) Request Transmission Status Report
        6) Change Password

    Enter your choice:
```

Exhibit 4-15 Main Menu Display After Change Compression Method Menu

The TP can now choose any menu item to continue or choose Logoff to end the session.

SECTION 5

RECEIVING ACKNOWLEDGMENTS

From the Main Menu, the TP receives acknowledgment files and/or transmits a file by choosing "Receive/Send File(s)." This section discusses receiving acknowledgment files, and Section 6 discusses sending files to the EMS System.

```
    MAIN MENU

    1) Logoff
    2) Receive/Send File(s)
    3) Change File Transfer Protocol [FTP]
    4) Change Compression Method [GZIP]
    5) Request Transmission Status Report
    6) Change Password

Enter your choice:  2
```

Exhibit 5-1 Choosing Receive/Send File(s)

When the TP chooses the "Receive/Send File(s)" menu item, the EMS TP Interface software checks to see if there are acknowledgment files to be sent to the TP. If there are no acknowledgment files, the message in Exhibit 5-2 is displayed and processing continues as discussed in Section 6. This allows TPs to submit files even if there are no acknowledgment files waiting delivery.

```
    Number of Acknowledgment File(s) in outbound mailbox: 000
```

Exhibit 5-2 Zero Acknowledgment File Display

If there are acknowledgment files, the text shown in Exhibit 5-3 is displayed. The message shows the number of acknowledgment files waiting delivery to the TP. All acknowledgment files waiting delivery to the TP are delivered before the TP can submit a file. The count of acknowledgment files is updated every time the TP selects item 2) Receive/Send File(s), from the Main Menu. Additional acknowledgment files that were generated during the session are reflected in this count.

```
   Number of Acknowledgment File(s) in outbound mailbox: 003

   Are you ready to receive files? Y/[N]: Y or y
```

Exhibit 5-3   One or More Acknowledgment Files Display

        If the TP enters anything other than "Y" or "y," the Main Menu
(Exhibit 5-1) is redisplayed. If the TP fails to respond affirmatively
three consecutive times he/she is disconnected.

        If the TP responds to the prompt affirmatively, a message
notifying the TP that the file transfer is about to begin is displayed.
The message depends on the protocol being used. For Zmodem, Xmodem or
Ymodem, the message in Exhibit 5-4 is displayed. For FTP, the message
shown in Exhibit 5-5 is displayed. The file transfer begins after the
appropriate notice.

```
   EFS ready for modem download.
```

Exhibit 5-4   Modem Download Notice

```
   Putting File(s) by FTP.
```

Exhibit 5-5   FTP "Putting Files" Notice

        All acknowledgment files are sent as separate files. If the TP is
also using compression, each file is separately compressed. (See
Appendix A for a description of acknowledgment file names.)

        If the TP Interface software detects that the transmission did
not complete successfully, the message in Exhibit 5-6 is displayed
followed by the Main Menu (Exhibit 5-1). If this happens three times
in a row, the TP is disconnected.

```
   Error transmitting Acknowledgment File(s).
```

Exhibit 5-6   Acknowledgment File Transmission Error Message

        If the TP Interface software does not detect an error, the
message shown in Exhibit 5-7 is displayed.

```
   Acknowledgment File(s) transmission complete.
```

Exhibit 5-7 Acknowledgment File Transmission Complete Message

Next, the TP is asked if he/she wants to send a file. Section 6 discusses sending files. After the receive acknowledgment process has completed, if the TP has been suspended, he/she is not allowed to transmit new files. Instead, the message "SUSPENDED TRANSMITTER/ETIN" is displayed, and the TP is disconnected from EMS (Exhibit 5-8).

```
SUSPENDED TRANSMITTER/ETIN.

DISCONNECTING FROM EFS.
```

Exhibit 5-8   Suspended TP Message

A suspended transmitter is allowed to log on to EMS to continue to receive acknowledgments but not allowed to transmit. Suspension occurs for the following reasons:

- Submission of a file with a virus (refer to Appendix B)
- Suspension by tax examiner for procedural reasons

Should this occur, the TP must contact the Home SPC EMS Help Desk to request removal of the suspended status.

SECTION 6

SENDING FILES

This section describes the process of transmitting files to EMS. It details the messages and prompts for TPs registered as both reporting agents and transmitters, as reporting agents only, and as transmitters only. Processing differs depending on what roles the TP is registered for and what role the TP is using to send the current file.

TPs execute the process discussed here after receiving their acknowledgment files as described in Section 5. Section 6 is divided into the following sections:

- Starting the Send Process, Section 6.1

- TP Registered as Both Reporting Agent and Transmitter, Section 6.2

- Sending as Transmitter, Section 6.3

- Sending as Reporting Agent, Section 6.4

It is important to note the differences in the "Sending Files" screens based on a combination of the TP registration and the mode in which the file is being sent. When a TP is registered as both a transmitter and reporting agent, an additional prompt is displayed to determine how the TP is submitting the current file. Whenever the TP is acting as a reporting agent, there is an additional prompt asking for the reporting agent PIN.

6.1   STARTING THE SEND PROCESS

After the receive acknowledgements process has completed, or if there are no acknowledgment files to receive, the TP is asked if he/she wants to send a file as shown in Exhibit 6-1.

```
    Do you want to send a file? Y/[N]: Y or y
```

Exhibit 6-1   Send Tax Return File Prompt

If the TP enters anything other than "Y" or "y," the Main Menu (Exhibit 5-1) is redisplayed. If there are no acknowledgment files for the TP to receive and the TP fails to respond affirmatively three times in a row, the TP is disconnected.

Otherwise, the next prompt depends on the file transfer protocol being used. If the TP is using Zmodem, Ymodem, or Xmodem, he/she is prompted to start the file transfer as shown in Exhibit 6-2.

```
    Enter an upload command to your modem program now.
```

Exhibit 6-2 Modem Upload Prompt

If the TP is using the FTP protocol, he/she is prompted to supply a file name as shown in Exhibit 6-3. After supplying the file name the TP is notified that the FTP transfer is beginning. This notice is also shown in Exhibit 6-3.

```
    Enter the LOCAL name of the file you
    are sending from your system: myfile

    Getting file by FTP.
```

Exhibit 6-3 FTP File Name Prompt

If the TP responds to the filename prompt in Exhibit 6-3 with only a carriage return (<CR>), then the notice shown in Exhibit 6-4 is displayed. If the TP responds with only a <CR> three times in a row, the TP is disconnected.
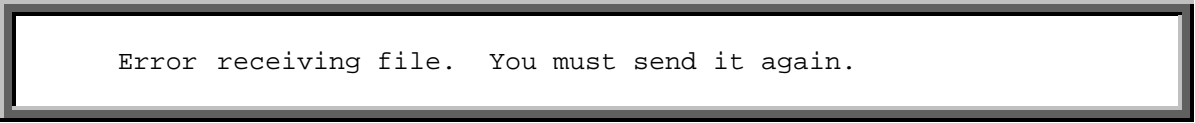
```
    Invalid file name.

    Enter the LOCAL name of the file you
    are sending from your system: <CR>
```

Exhibit 6-4 Invalid File Name Message

Once the TP has been notified that the file transfer is beginning (Exhibit 6-2 or 6-3), the TP has 60 seconds to begin his/her file transfer. If the EMS does not receive at least part of the TP's file within 60 seconds, the TP is disconnected.

If the TP Interface software detects that the transmission did not complete successfully, the message in Exhibit 6-5 is displayed followed by the Main Menu. If this happens three consecutive times, the TP is disconnected.

```
Error receiving file.  You must send it again.
```

Exhibit 6-5 Transmission Receipt Error Message

If the TP Interface software does not detect an error, the prompts displayed vary depending on how the TP is registered and how the TP is sending the file (as either transmitter or reporting agent). These prompts are described in the sections below. See Section 2 for a description of TP registration types.

6.2   TP REGISTERED AS BOTH REPORTING AGENT AND TRANSMITTER

If a TP is registered as both as a transmitter and a reporting agent, the query in Exhibit 6-6 is displayed.

```
   Are you submitting this file as a reporting agent? Y/[N]: N or n
```

Exhibit 6-6   Reporting Agent Query

If the TP responds with "N" or "n," processing continues as in Section 6.3, Sending as Transmitter. If the TP responds with "Y" or "y" to the prompt, processing continues as in Section 6.4, Sending as Reporting Agent.

See Section 11 Exhibits 11-2 and 11-3 for examples of a complete session where TPs can be both a transmitter and a reporting agent.

6.3   SENDING AS TRANSMITTER

When a TP is registered only as a Transmitter or has answered "N" or "n" to the prompt shown in Exhibit 6-6, processing continues as follows.

If the TP Interface software does not detect an error, the transmission confirmation message shown in Exhibit 6-7 is displayed followed by the Main Menu (Exhibit 6-8). If the TP hangs up without receiving the confirmation message, there is no guarantee that the EMS will process the file(s).

The transmission confirmation message contains the Global Transmission Key (GTX Key) and the reference file name. The GTX Key is the unique identifier assigned by the EMS to the file sent by the TP, and is used to track the processing of the file and its subsequent acknowledgment. The reference file name is used when constructing the name of the acknowledgment file delivered to the TP. (See Appendix A for a description of the GTX Key and its relationship to the reference file name.)

```
Transmission file has been received with the following GTX Key:

      S20041020123423.1700                    10200001
```

Exhibit 6-7 Transmission Confirmation Message Display

The Main Menu is displayed again as shown in Exhibit 6-8. The TP can choose any menu item to continue or Logoff to end the session.

```
      MAIN MENU

      1) Logoff
      2) Receive/Send File(s)
      3) Change File Transfer Protocol [FTP]
      4) Change Compression Method [GZIP]
      5) Request Transmission Status Report
      6) Change Password

   Enter your choice:
```

Exhibit 6-8 Main Menu Display

See Section 11, Exhibit 11-1 for an example of a complete session where TP is registered only as a transmitter.

6.4   *SENDING AS REPORTING AGENT*

When a TP is registered only as a reporting agent or has answered "Y" or "y" to the prompt shown in Exhibit 6-6, processing continues as follows.

If the TP Interface software does not detect an error, the jurat is displayed along with a prompt for the TP signature as shown in Exhibit 6-9.

```
     ------------------------------------------------------------
    |  Under penalties of perjury, I declare that to the        |
    |  best of my knowledge and belief the tax returns          |
    |  being submitted electronically in the file               |
    |  identified as follows:                                   |
    |                                                           |
    |     IRS Generated GTX Key                                 |
    |    --------------------                                   |
    |      S20041020123423.1700                                 |
    |                                                           |
    |  are true, correct and complete, and I have filed         |
    |  Reporting Agent Authorizations for Magnetic Tape/        |
    |  Electronic Filers (Forms 8655) with the IRS for all      |
    |  tax returns being submitted.                             |
     ------------------------------------------------------------

    You make the above declaration by entering the Personal
    Identification Number ("PIN") assigned to you for the
    purpose of signing these tax returns.  This will be your
    signature.


    Please enter PIN to sign the tax return(s): mypin
```

Exhibit 6-9 Jurat Display and PIN Prompt

If the TP enters an invalid PIN, the message shown in Exhibit 6-10 is displayed. If the TP does not successfully sign the jurat in three tries, then the TP is disconnected.

```
    Invalid PIN.
```

Exhibit 6-10 Invalid PIN Notice

After the TP has successfully signed the jurat, the transmission confirmation message is displayed as shown in Exhibit 6-11. The transmission confirmation message contains the Global Transmission Key (GTX Key) and the reference file name. The GTX Key is the unique identifier assigned by the EMS to the file sent by the TP, and is used to track the processing of the file and its subsequent acknowledgment. The reference file name is used when constructing the name of the acknowledgment file delivered to the TP. (See Appendix A for a description of the GTX Key and its relationship to the reference file name.)

```
  Transmission file has been received with the following GTX key:

      S20041020123423.1700                         10200001
```

Exhibit 6-11 Transmission Confirmation Message Display

The Main Menu is displayed again as shown in Exhibit 6-12. The
TP can choose any menu item to continue or Logoff to end the session.

```
      MAIN MENU

      1) Logoff
      2) Receive/Send File(s)
      3) Change File Transfer Protocol [FTP]
      4) Change Compression Method [GZIP]
      5) Request Transmission Status Report
      6) Change Password

   Enter your choice:
```

Exhibit 6-12 Redisplay of Main Menu

See Section 11, Exhibit 11-4 for an example of a complete session
where the TP is registered only as a reporting agent.

SECTION 7

REQUEST TRANSMISSION STATUS REPORT

A Transmission Status Report may be requested from the Main Menu shown in Exhibit 7-1. Examples of Transmission Status Reports are contained in Appendix D. A transmission status report will show the status of all transmissions submitted by the TP since 12:00 a.m. five days ago. For State TPs the report also shows the status of all state acknowledgments that have been received and redirected to other TPs since 12:00 a.m. five days ago. Only one report may be requested per TP session. The report is returned to the TP in an HTML format file that is suitable for viewing with a Web browser after the TP session completes.

```
        MAIN MENU

    1) Logoff
    2) Receive/Send File(s)
    3) Change File Transfer Protocol [FTP]
    4) Change Compression Method [GZIP]
    5) Request Transmission Status Report
    6) Change Password

  Enter your choice:  5
```

Exhibit 7-1 Choosing Request Transmission Status Report

When the TP chooses the "Request Transmission Status Report" menu item, a message notifying the TP that the report transfer is about to begin is displayed. The message depends on the protocol being used. For Zmodem, Xmodem, or Ymodem, the message in Exhibit 7-2 is displayed. For FTP, the message shown in Exhibit 7-3 is displayed. The file transfer will begin after the appropriate message.

```
  EFS ready for Report download.
```

Exhibit 7-2 Modem Download Message

```
  Putting Report by FTP.
```

Exhibit 7-3 FTP "Putting Report File" Message

If the TP has selected compression, the report is compressed. (See Appendix D for a description of Transmission Status Report file names.)

If the TP Interface software detects that the transmission did not complete successfully, the message in Exhibit 7-4 is displayed followed by the Main Menu. If this happens three times in a row, the TP is disconnected.

```
    Error transmitting Report File.
```

Exhibit 7-4 Report File Transmission Error Message

If the TP Interface software does not detect an error, the message shown in Exhibit 7-5 is displayed.

```
    Report File transmission complete.
```

Exhibit 7-5 Report File Transmission Complete Message

After the file transfer has completed, the Main Menu is redisplayed.

TPs can make only one report request per session. If the TP tries to request a report again, the message shown in Exhibit 7-6 is displayed followed by the Main Menu. If this happens three times in a session, the TP is disconnected.

```
    Only one Report request allowed.
```

Exhibit 7-6 Report Request Error

SECTION 8

CHANGING PASSWORD

TPs are responsible for maintaining their passwords. When a TP changes his/her password at one EMS processing center, it will be propagated to the other EMS processing center. Therefore, a TP should only execute the change password procedures once per new password.

To change his/her password, the TP chooses "Change Password" as shown in Exhibit 8-1.

```
     MAIN MENU

     1) Logoff
     2) Receive/Send File(s)
     3) Change File Transfer Protocol [ZMODEM]
     4) Change Compression Method [NONE]
     5) Request Transmission Status Report
     6) Change Password

Enter your choice:  6
```

Exhibit 8-1 Choosing "Change Password"

The TP is then prompted to enter his/her current password and to enter his/her new password twice as shown in Exhibit 8-2. Not only will the passwords not be displayed, but also there will be no indication of how many characters the TP has typed. The new password must meet the rules described in Appendix G.

```
Enter current password:
Enter new password:
Re-enter new password:
```

Exhibit 8-2 Current and New Password Prompts

If the TP's responses meet the rules for changing the password, the password is changed and the message shown in Exhibit 8-3 is displayed. The TP will now use the new password to log into any EMS processing center. The Main Menu is then redisplayed as shown in Exhibit 8-4.

```
   Password changed.
```

Exhibit 8-3   Password Change Confirmation

```
     MAIN MENU

     1) Logoff
     2) Receive/Send File(s)
     3) Change File Transfer Protocol [ZMODEM]
     4) Change Compression Method [NONE]
     5) Request Transmission Status Report
     6) Change Password

   Enter your choice:
```

Exhibit 8-4   Redisplay of Main Menu

If the TP's responses to the password prompts do not meet the rules for changing the password, then an error message is displayed. A TP is given three tries per session to change his/her password.

If the TP incorrectly enters his/her current password, the password is not changed and the message shown in Exhibit 8-5 is displayed. If the TP has unsuccessfully attempted to change his/her password less than three times, he/she is prompted for his/her current and new passwords as previously shown in Exhibit 8-2. If this is the third unsuccessful attempt, then the Main Menu is redisplayed as previously shown in Exhibit 8-4.

```
   Incorrect current password.
```

Exhibit 8-5   Incorrect Current Password Message

If the TP does not enter the same password in response to the "Enter new password" and "Re-enter new password" prompts, then the password is not changed and the message shown in Exhibit 8-6 is displayed. If the TP has unsuccessfully attempted to change his/her password less than three times, he/she is prompted for his/her current and new passwords as previously shown in Exhibit 8-2. If this is the third unsuccessful attempt, then the Main Menu is redisplayed as previously shown in Exhibit 8-4.

```
    New passwords don't match.
```

Exhibit 8-6   Unmatched New Passwords Message

If the TP enters a new password that does not meet the rules identified in Appendix G, then the password is not changed and the message shown in Exhibit 8-7 is displayed.   If the TP has unsuccessfully attempted to change his/her password less than three times, he/she is prompted for his/her current and new passwords as

previously shown in Exhibit 8-2. If this is the third unsuccessful
attempt, then the Main Menu is redisplayed as shown in Exhibit 8-4.

```
    Password rule(s) have not been met.
```

Exhibit 8-7   Password Rule Violation Message

If it has been less than seven days since the last time the TP
changed his/her password, he/she is prompted for his/her current and
new passwords as previously shown in Exhibit 8-2, the password is not
changed and the message shown in Exhibit 8-8 is displayed. The TP is
then returned to the Main Menu as previously shown in Exhibit 8-4. If
it has been less than seven days and the TP needs to change his/her
password, he/she should contact his/her Home SPC EMS Help Desk.

```
    Less than 7 days from last change. Password not changed.
```

Exhibit 8-8   Less Than 7 Days Message

If the TP has concurrent sessions, only one can change the
password. If the TP attempts to change his/her password in more than
one session, only one will be allowed and the message shown in
Exhibit 8-9 is displayed to the other session(s). After this message
is displayed, the TP is returned to the Main Menu as previously shown
in Exhibit 8-4.

```
    Password not changed. Another session is trying to change the
    password.
```

Exhibit 8-9   Another Session Changing Password Message

If a system error occurs during the change password operation,
the password may or may not be changed. The messages shown in
Exhibit 8-10 are displayed and the TP's session is terminated. The TP
may need to try both his/her current and new passwords on his/her next
login.

```
   System error.

   DISCONNECTING FROM EFS.
```

Exhibit 8-10   System Error and Disconnecting Message

The TP can only choose the "Change Password" menu item once during a session. If the TP chooses the "Change Password" menu item more than once, the message shown in Exhibit 8-11 is displayed immediately. If this happens three times in a session, the TP is disconnected; otherwise the Main Menu is redisplayed as previously shown in Exhibit 8-4. **Note**: You will not go through the password prompts for this scenario.

```
   Can only choose Change Password once.
```

Exhibit 8-11   Change Password Once Message

Except in the case of a system error the Main Menu is displayed as previously shown in Exhibit 8-4 after the TP completes the change password process whether or not he/she was successful.

SECTION 9

LOGGING OFF THE SYSTEM

To end his/her session, TP chooses "Logoff" from the Main Menu (Exhibit 9-1).

```
        MAIN MENU

    1) Logoff
    2) Receive/Send File(s)
    3) Change File Transfer Protocol [FTP]
    4) Change Compression Method [GZIP]
    5) Request Transmission Status Report
    6) Change Password

Enter your choice:  1
```

Exhibit 9-1 Choosing Logoff

The TP Interface software performs any necessary cleanup activities, records statistical information, and then displays the message shown in Exhibit 10-2. The TP should not hang up before receiving the disconnect message. If he/she does hang up prematurely, EMS may not complete its cleanup activities. This could result in the TP receiving his/her acknowledgment files again in the next login session or having the submission file discarded.

```
    DISCONNECTING FROM EFS.
```

Exhibit 9-2 End of TP Session Message

SECTION 10

TRADING PARTNER SESSION EXAMPLES

This section provides complete examples of the TP sessions that receive acknowledgment files and submit a tax return file. The following four scenarios based on the TP registration are illustrated:

- TP registered only as a transmitter (Exhibit 10-1)

Exhibit 10-1 illustrates a complete TP session when the TP can be only a transmitter. It includes TP login, receipt of acknowledgment files, transmission of a tax return file, and session termination.

```
WARNING!  THIS SYSTEM IS FOR AUTHORIZED USE ONLY!

This computer system is the property of the United States Government.  The
Government may monitor any activity on the system and retrieve any
information stored within the system.  By accessing and using this system, you
are consenting to such monitoring and information retrieval for law
enforcement and other purposes.  Users should have no expectation of privacy
as to communication on or stored within the system, including information
stored locally on the hard drive or other media in use within the unit (e.g.,
floppy disks, tapes, CD-ROM, etc.).

login: 00000
Password:
Last login: Tue Sep  4 10:39:31 from computername

          ---------------------------------------------------------
             F O R    O F F I C I A L    U S E    O N L Y

                     #     #####    ####
                     #     #    #   #
                     #     #    #   ####
                     #     #####       #
                     #     #  #  #     #
                     #     #   #   ####

                     U.S. Government computer

             F O R    O F F I C I A L    U S E    O N L Y
          ---------------------------------------------------------

          MAIN MENU

          1) Logoff
          2) Receive/Send File(s)
          3) Change File Transfer Protocol [ZMODEM]
          4) Change Compression Method [NONE]
          5) Request Transmission Status Report
          6) Change Password

       Enter your choice:  2
```

**Exhibit 10-1 Transmitter TP Session to Pick Up Acknowledgments
and Transmit a Tax Return File (Registered Only as Transmitter)**

```
    Number of Acknowledgment File(s) in outbound mailbox: 003

    Are you ready to receive files? Y/[N]: Y

    EFS ready for modem download.

    Acknowledgment File(s) transmission complete.

    Do you want to send a file? Y/[N]: Y

    Enter an upload command to your modem program now.

    Transmission file has been received with the following GTX Key:

    S20041020123423.1700                    10200001

        MAIN MENU

        1) Logoff
        2) Receive/Send File(s)
        3) Change File Transfer Protocol [ZMODEM]
        4) Change Compression Method [NONE]
        5) Request Transmission Status Report
        6) Change Password

    Enter your choice:  1

    DISCONNECTING FROM EFS.
```

Exhibit 10-1 (A) Transmitter TP Session to Pick Up Acknowledgments and Transmit a Tax Return File (Registered Only as Transmitter)